

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,167	12/16/1999	HIDETO SUZUKI	P/1905-91	7202
7590 04/08/2004			EXAMINER	
STEVEN I. WEISBURD			MUNOZ, GUILLERMO	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS			ART UNIT	PAPER NUMBER
41ST FLOOR	OF THE AMERICAS		2634	• ,
NEW YORK, NY 10036-2714			DATE MAILED: 04/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application/Control Number: 09/464,167

Art Unit: 2634

DETAILED ACTION

Response to Argument

Applicant's arguments, see page 9, lines 9-16, filed September 30, 2003, with respect to the rejection(s) of claim(s) 1, 3, and 5 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicants amendments to claims 1-6.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

a. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is: interference canceller/demodulator unit.

Regarding claim 1, the element "interference canceller/demodulator unit" is critical or essential to the practice of the invention, but not defined in the claim(s) and is not enabled by the disclosure. It is suggested the phrase "interference canceller" in claim 1, line 2 be replaced with —interference canceller/demodulator unit—.

Regarding claim 3, see claim 1 above.

Application/Control Number: 09/464,167

Art Unit: 2634

b. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrases "gain circuit for use in a DS-CDMA (Direct Sequence-Code Division Multiple Access) multi-user interference canceller" (claim 1, lines 1-2), "the circuit comprising: a variable gain amplifier, and a gain controller coupled to the variable gain amplifier" (claim 1, lines 3-5), and "controlling gains of the variable gain amplifier prior to baseband decoding" (claim 1, lines 9-10) render the claim indefinite. The language of the claim is unclear regarding the structural relationship of the elements in claim 1. It appears in Fig. 4 that the gain circuit is not located in an interference canceller as claimed. It is suggested the claim be amended to more clearly indicate how the interference canceller/demodulator unit, as suggested above (35 U.S.C. 112 rejection, section a), is related to the gain circuit of claim 1.

Further regarding claim 1, the phrase "baseband decoding" renders the claim indefinite.

The element performing this function "decoding" is not defined in the claim(s) and is not enabled by the disclosure. It is suggested the phrase "prior to baseband decoding" in claim 1, line 10 be replaced with —prior to interference canceller/ demodulator unit processing—.

Regarding claim 2, the phrase "The canceller" in claim 2, line 1, renders the claim indefinite. The language of the claim is unclear as whether the interference canceller/demodulator unit, as suggested above (35 U.S.C. 112 rejection, section a), or the gain controller performs the comparison process. It is suggested the phrase "the canceller" be replaced with —the gain controller—.

Application/Control Number: 09/464,167

Art Unit: 2634

Regarding claim 3, the phrases "a variable gain amplifier whose gain can be controlled by a control signal" (claim 3, line 3), and "control signal to correct the current gain to an AGC" (claim 3, line 17) render the claim indefinite. The language of the claim is unclear regarding the structural relationship of the variable gain amplifier and the AGC in claim 3. It is suggested the claim be amended to more clearly indicate the structural relationship of the variable gain amplifier and the AGC in claim 3.

Regarding claim 4, see claim 2.

Regarding claim 5, the phrases "evaluating a comparison result" (claim 5, line 9) and "basis of an evaluation result" (claim 5, line 12) renders the claim indefinite. The language of the claim is unclear as to whether the evaluation result is from the evaluating of a comparison result. It is suggested the phrase "basis of an evaluation result" be replaced with —basis of the evaluation of the comparison result—.

Regarding claim 6, the claim comprises both method and means limitations. "The claim does not provide competitors with an accurate determination of the Metes and Bounds of protection involved so that an evaluation of the possibility of infringement may be ascertained with a reasonable degree of certainty." (Lyell 17 USPQ2d 1548, Bd. Pat. App. & Inter. 1990)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 703-305-4224. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m.

Dermo Marios

Art Unit: 2634

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GM

April 2, 2004

stephen Chin Supervisory patent examine:

TECHNOLOGY CENTER 2600